Successful Myomectomy During Caesarean Section: A Case Report

Sunita Murmu

ABSTRACT

Introduction: Elective myomectomy at the time of cesarean section has been traditionally discouraged because of the fear of massive obstetrics haemorrhage. The management of myoma during caesarean section (CS) is still a controversial issue. At times, myomectomy is mandatory to effect delivery during caesarean section. Increasing evidence suggests that myomectomy can be performed concurrently with caesarean section without an increased risk of blood transfusion or hysterectomy.

Case Report: A second gravida presented at term with transverse lie with big anterior lower segment fibroid with low lying placenta. Caesarean section was required for fetal distress and alive 2.45kg weighted male infant with Apgar score of 9 at one minute, was born. As uterine incision could not be closed because of the myoma, myomectomy was performed during caesarean section unavoidably. Both the mother and baby had favourable outcome.

Conclusion: Caesarean myomectomy can be safely performed in majority of patients with myomas in properly selected cases.

Keywords: Fibroid, Pregnancy, Myomectomy

INTRODUCTION

Fibroids (leiomyomas) are the most prevalent uterine tumour in pregnancy, with a prevalence of 10.7% in the first trimester. Fibroids are more common in women originating from South Asian, African and Middle Eastern subcontinents. Between 10 and 30% of women with fibroids will develop a pregnancy complication.²

PPH is the most common cause of maternal morbidity and mortality and fibroids can be a formidable cause PPH. Uterine fibroids represent one of the most challenging causes of PPH, which can result in peripartum hysterectomy. Myomectomy during caesarean section is associated with hemorrhage, technical operative difficulties and thereby increases morbidity of the patient. Fibroids are also associated with malpresentation, preterm labour and an increase in caesarean section rates. At present there are no clear cut guidelines on management of fibroids in pregnancy and this case report intends to discuss the complications and management issues with fibroids in pregnancy.

CASE REPORT

A 26 years old female, G2P1L1 with previous one vaginal delivery presented at 37 weeks pregnancy. Her USG at 37 weeks showed single fetus in transverse lie and anterior low lying placenta with fibroid at anterior lower uterine segment measuring 12.2cm x 10.4 cm. Her pregnancy was uneventful till term. She was referred to our hospital at term for further management. She was planned for elective cesarean section at 38 weeks. Risk of excessive bleeding, need for multiple

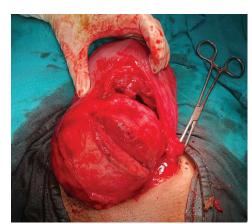


Figure-1:



Figure-2:

blood transfusions, hysterectomy was explained to patient and her relatives in view of low lying placenta and big fibroid. But she was posted for emergency cesarean section for fetal distress.

Her systemic and abdominal examinations were normal. All her pre-operative blood investigations were also within normal limits. Her pre-operative hemoglobin level was 11gm/dl. Abdomen was opened by Pfannenstiel incision. Intramural fibroid was identified at lower segment of uterus in the line of incision. After opening the utero-vesical fold, bladder was separated. Myoma was pushed down and transverse incision was given on uterus above the myoma.

Specialist, Department of Obstetrics and Gynaecology, Tata Main Hospital, Jamshedpur, Jharkhand, India

Corresponding author: Dr Sunita Murmu, Department of Obstetrics and Gynaecology, Jamshedpur, Jharkhand, India

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Thick pasty meconium was present. A male baby of 2.45 kg was delivered without any difficulty and the Apgar score of newborn at 1 minute was 9. Placenta with membranes was removed completely. Blood loss from the placental site was average and was controlled with intramural PGF2 α (carboprost) injection. As the location of fibroid was causing difficulty in closure of uterine incision, immediate decision for myomectomy was taken. The myoma was enucleated and the myoma bed was closed. Uterine incision was closed in two layers. Adequate hemostasis was achieved without much difficulty and the post-operative hemoglobin was $10.8 \, gm$. Her postoperative stay in hospital remained uneventful and she was discharged on fifth day of surgery.

DISCUSSION

Fibroids are smooth muscle tumors which present with different spectrum of clinical presentation depending upon their location. Malpresentation, preterm labour, abruption, dystocia, PPH, placenta previa, increased operative delivery, IUGR and subinvolution are common problems of fibroids in pregnancy.3 Suggested principles for myomectomy during caesarean section are enlisted henceforth. Consent for caesarean section in women with large or cervical fibroids must include knowledge of the risk of hysterectomy, admission to intensive care and modified skin incisions and blood transfusion. The uterine incision should be made away from any fibroid to reduce the risk of torrential bleeding. Fibroids can interfere with the feasibility of a caesarean section. Broad ligament fibroids can result in dextrorotation of the uterus, and identifying key anatomical landmarks such as round ligaments and fallopian tubes may assist orientation. Dextrorotation should be corrected prior to any uterine incision. Uterine artery ligation undertaken immediately following a caesarean section has been prospectively evaluated. This procedure decreased blood loss and reduced the risk of a myomectomy or hysterectomy.4 Growing evidence suggests that myomectomy undertaken at the time of caesarean section is safe and cost effective since it avoids possible fibroid removal at a later stage. Fibroids causing difficulty with closure of the uterine incision, to facilitate safe delivery of the foetus or visible subserosal fibroids are indications for this procedure.

In a retrospective case-control study⁵, 47 women with fibroids undergoing a myomectomy at the time of caesarean section were compared with a group of 94 women with fibroids who underwent a caesarean section without myomectomy. No significant difference was seen in haemoglobin levels, incidence of blood transfusions or postoperative fever between the groups. However, there were significant differences in mean operating time with myomectomy (an additional 15 minutes) and length of hospital stay (an additional 0.4 days). The most common site for myomectomy was where fibroids were located within the uterine incision, rather than those that were large, intramural, fundal or found adjacent to the fallopian tubes. The findings of this study are supported by a larger study involving 1082 women with leiomyomas, met the inclusion criteria; 443 (41.0%) women underwent

caesarean myomectomy and 639 (59.1%) underwent caesarean delivery alone. The drop in haemoglobin after surgery was 0.30 g/dl greater in the caesarean myomectomy group than in the control group, but the difference was not significant. The operative time was 4.94 minutes longer in the caesarean myomectomy group, but again the difference was not significant. The overall incidence of fever was comparable in the two groups. No hysterectomies were performed in any of the included studies⁶, which drew similar conclusions in patients with fibroids. Adverse outcomes reported with caesarean myomectomy is the higher risk of placenta praevia, abnormal lie and talipes.⁷ These risks and the inherent danger of bleeding with placenta preavia should be taken into consideration when evaluating the benefit of voiding a later interval myomectomy.

CONCLUSION

Caesarean myomectomy is now a safe and recommended procedure. However patient selection, pre-operative planning, and post-operative care are key factors for successful outcome.

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